

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 March 2007 (08.03.2007)

PCT

(10) International Publication Number
WO 2007/025569 A1

(51) International Patent Classification:
H04R 25/00 (2006.01) *H03G 3/20* (2006.01)

(21) International Application Number:
PCT/EP2005/054311

(22) International Filing Date:
1 September 2005 (01.09.2005)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **WIDEX A/S** [DK/DK]; Ny Vestergaardsvej 25, DK-3500 Værløse (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PALU-DAN-MUELLER, Carsten** [DK/DK]; Dronning Ingrid's Vej 16, DK-3650 Olstykke (DK). **LUDVIGSEN, Carl** [DK/DK]; Borghaven 19, DK-2500 Valby (DK). **VIKAR DAMSGAARD, Anne** [DK/DK]; Grimskar 4, Ganløse, DK-3660 Stenløse (DK).

(74) Agent: **BETTEN & RESCH**; Theatinerstr. 8, 80333 München (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

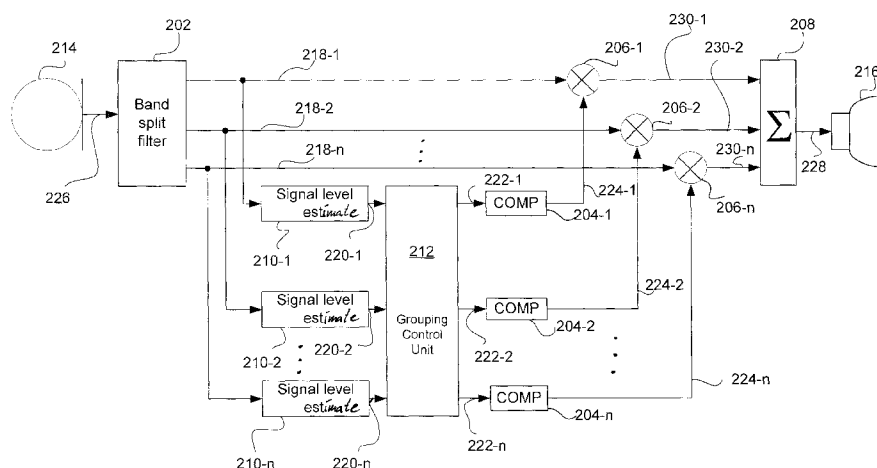
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR CONTROLLING BAND SPLIT COMPRESSORS IN A HEARING AID



200

(57) Abstract: A method and hearing aid for processing sound signals for hearing impaired persons by providing multi-band compression processing is described. An input sound signal is filtered into a number of frequency bands to obtain band split signals. A signal level for each of the band split signals is determined and the frequency bands are arranged into a number of groups. Based on the signal levels in each of the groups, a compressor input level for a number of band split compressors each associated to one of the frequency bands is calculated. A compressor gain for each band split compressor is determined based on the corresponding compressor input signal and the band split signals are amplified with the corresponding compressor gain to produce an output sound signal.

WO 2007/025569 A1